

Amendments to the Specification

Please amend the specification as follows.

Please amend the paragraph beginning at page 1, line 11, as follows:

The present invention relates to an apparatus for recording copyrighted content onto optical disks, ~~and and, in particular~~ particular, relates to improvements when different formats are used for industrial-use optical disks and consumer-use optical disks.

Please amend the paragraph beginning at pages 1-2, line 18, as follows:

DVDs, which have become representative optical disks nowadays, can be classified into two types, namely, consumer DVDs available to general consumers and industrial DVDs available only to specific industries. The latter DVD records, for example, content of a movie film which is currently showing at theaters, and is intended not for home ~~use~~ use, but for public use. With the development of industrial DVDs, the media for distributing movie content for industrial use are expected to shift from films and tapes to DVDs.

Please amend the paragraph beginning at pages 2-3, line 3, as follows:

Since content of a movie which is currently showing at theaters is recorded on a DVD for ~~industrial-use~~ use, such as in-flight screening, if such a DVD is stolen or lost, the copyright holder of the movie content will suffer tremendous damages. This is because if the industrial DVD is stolen or lost and acquired by a third party, the third party can show the movie content recorded on the DVD in an area where the release of the movie is scheduled, without permission of the copyright holder. When this happens, the copyright holder cannot earn an intended profit at the box office. Besides, the airline company has to pay the copyright holder ~~in~~ compensation for the damages caused by the theft or loss. This could deteriorate the ~~relation~~ relationship between the copyright holder and the airline company. To avoid such a problem, when recording the movie content onto the industrial DVD, the copyright holder subjects the movie content to encryption which differs with that of the consumer DVD, to prevent the movie content recorded on the industrial DVD from being played back by DVD players other than industrial DVD players. Since consumer DVD players cannot play back the movie content recorded on the

industrial DVD, even if the industrial DVD is stolen or lost, the movie content will not be shown without permission of the copyright holder.

Please amend the paragraph beginning at page 3, line 3, as follows:

However, the above consideration for copyright protection can lead to another problem on the airplane. Given that consumer DVDs are likely to be carried in the airplane together with industrial DVDs, if the industrial DVDs and the consumer DVDs are stored haphazardly, an industrial DVD may be mistaken for a consumer DVD, taken not to the in-flight screening ~~room~~ room, but to the passenger cabin, and loaded to a consumer DVD player equipped in a passenger seat. Since the industrial DVD has been encrypted using a different cipher, it cannot be played back by the consumer DVD player. However, the passenger in the seat would not know the reason why the movie content cannot be played back, and may complain that the DVD player is faulty. It is undesirable for the airline company to give the impression that equipped devices are faulty. Also, flight attendants do not want to be disturbed by such a complaint.

Please amend the paragraph beginning at pages 3-4, line 23, as follows:

~~Hence~~Hence, the object of the present invention is to provide a recording apparatus that records copyrighted digital content onto an optical disk, so as not to confuse a user even if the optical disk is loaded to a reproduction apparatus which is not designed for reproducing the optical disk.

Please amend the paragraph beginning at pages 5-6, line 20, as follows:

With this construction, when the optical disk is for industrial use, the copyright protection for the digital content is ~~more strengthened~~ stronger. Accordingly, copyright holders can provide movie content of high commercial ~~values~~ value to airline companies and others through optical disks, without worrying about unauthorized use of the movie content.

Please amend the paragraph beginning at pages 10-11, line 20, as follows:

The PGCI table 3 is a table having a plurality of PGC (program chain) information (PGCIs #1, #2, #3, ..., #N) corresponding to the multiple titles. Each PGCI defines the playback order of the VOBs for the corresponding title. As shown by guideline y4, each PGCI includes pointer information for the VOBs and playback control information. The pointer information shows which VOBs should be read and the order of reading those VOBs. With this pointer information, the VOBs that should be read and the playback order of those VOBs are indicated to the DVD player for the corresponding title, such as the theater version, the director's cut version, or the short version. Meanwhile, the playback control information defines accessory control that should be exercised by the DVD player, while the VOBs are being played back in the order defined by the pointer information. The playback control information includes UOP (user operation permission) information defining user operations unique to the defined playback order, a command ("Pre Command") which is unique to the defined playback order and is executed before the playback of the VOBs, a command ("Post Command") which is unique to the defined playback order and is executed after the playback of the VOBs, link destination information defining a link to other PGCI, and cell information defining valid sections in the VOBs for each title.

Please amend the paragraph beginning at page 16, line 11, as follows:

The disk key for the CSS-DVD depends on the ~~CSS-DVD~~ CSS-DVD, but does not depend on the consumer DVD player 13. Accordingly, the disk key which has once been generated will never be generated again. In contrast, the device key for the EWCPS-DVD depends on the industrial DVD player, and can be generated over and over again. Also, the VOBs recorded on the EWCPS-DVD cannot be played back without the IC card. Furthermore, even if the device key is revealed, a new device key can be generated. Thus, the playback of the VOBs recorded on the EWCPS-DVD is more strictly managed than the CSS-DVD. Note here that the encryption using the device key is based on a public key cipher which employs different keys for encryption (public device key) and decryption (secret device key).

Please amend the paragraph beginning at pages 17-18, line 22, as follows:

The initial public device key database 31 is a database storing x initial public device keys (x being the number of industrial DVD players). The initial public device keys are public keys used in public key encryption, and are paired with initial secret device keys which are respectively stored in the x industrial DVD players. The initial public device keys stored in the initial public device key database 31 are generated when manufacturing the industrial DVD players, and will not be generated again.

Please amend the paragraph beginning at pages 23-24, line 6, as follows:

In the case of the EWCPS-DVD, the volume data generating unit 54 records the video title set and the index 4 in the following way. The volume data generating unit 54 generates volume data including a VIDEO_TS directory and an EWCPS_TS directory, and records the video title set (made up of the VOB set 1 and the VTSI 2) and the index 4 to the EWCPS_TS directory. The EWCPS_TS directory is a directory that is arranged to be accessed by the industrial DVD player 15. When the EWCPS-DVD is loaded to the industrial DVD player 15, the industrial DVD player 15 first executes the FP_PGCI 6 in the EWCPS_TS directory, and then plays back a title included in the video title set. Thus, the video title set is not written to the VIDEO_TS directory in the case of the EWCPS-DVD. FIG. 8 shows the storage contents of the VIDEO_TS directory and EWCPS_TS directory on the EWCPS-DVD. In the drawing, the video title set (made up of the VOB set 1 and the VTSI 2) and the index 4 are written in the EWCPS_TS directory, whereas an index 60 is written in the VIDEO_TS directory. Since the video title set which forms the movie content is written in the EWCPS_TS directory, even if a person with a bad intentions purpose steals the EWCPS-DVD in from the airplane and loads it to the consumer DVD player 13, he or she cannot reproduce the movie content. In addition, since the VOB set 1 has been encrypted using a cipher different with the CSS-DVD, the movie content cannot be reproduced even if a device device, such as a personal computer computer, that can access the EWCPS_TS directory is used.

Please amend the paragraph beginning at pages 30-31, line 10, as follows:

FIGS. 12-15 show how the CSS-DVD and EWCPS-DVD recorded by the recording apparatus 12 are utilized on the airplane. The drawings show the inside of the airplane where the consumer DVD player 13 and the industrial DVD player 15 are equipped. In the drawings, several CSS-DVDs and EWCPS-DVDs recorded by the recording apparatus 12 are stored in an in-flight library 71. Also, the industrial DVD player 15 connected to a projector 73 is equipped in an in-flight screening room 72, and the consumer DVD player 13 is equipped in a passenger seat 75 in a passenger cabin 74. Suppose an EWCPS-DVD and a CSS-DVD stored in the library 71 are respectively loaded to the industrial DVD player 15 in the screening room 72 and the consumer DVD player 13 in the passenger cabin 74 as indicated by arrows jy1 and jy2. In this case, the movie content recorded on the EWCPS-DVD and the CSS-DVD ~~is~~ are properly played back as shown in FIG. 13.